

ABSTRACT OF THE DISCLOSUREISOLATING POWER SUPPLY

An isolating power supply for electrical equipment comprises a transformer having an input for a mains alternating current (AC) power supply, a rectifier by which the output of the transformer can be rectified, and a primary energy storage device for electrically smoothing the output of the rectifier. A switching device is provided which is electrically connected to the output of the primary energy storage device and which can be switched between a conducting state and a non-conducting state, and a secondary energy storage device is also provided which is electrically connected to the switching device. In use, when the switching device is in a non-conducting state, the primary energy storage device stores the output from the rectifier and the secondary energy storage device is electrically isolated from the primary energy storage device and supplies an electrical output to associated electrical equipment. When the switching device is a conducting state, the primary and secondary energy storage devices are electrically connected and the secondary energy storage device stores the output from the primary energy storage device. Preferably, the switching device is a power MOSFET switching device.